



## Process Flow Chart

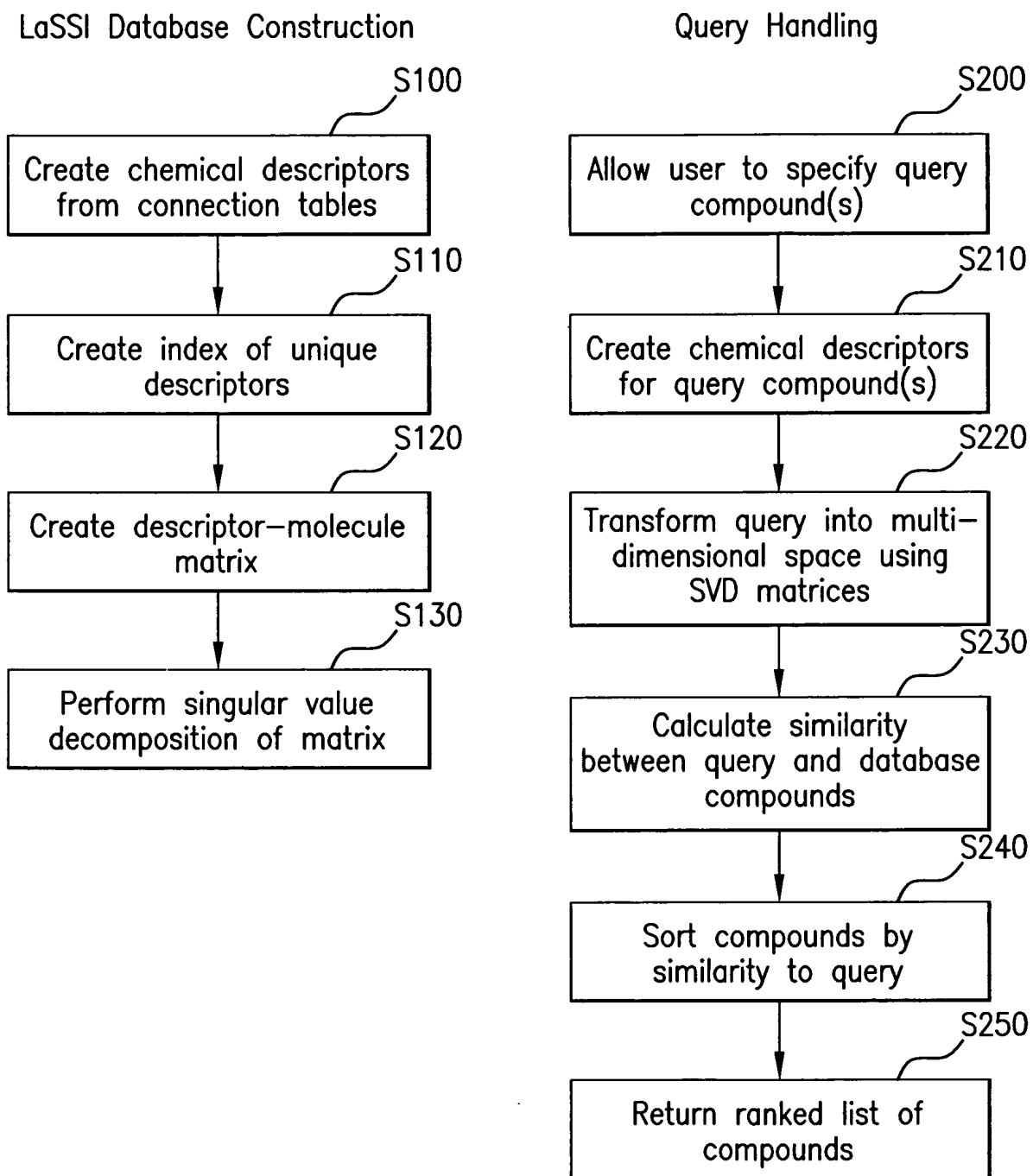
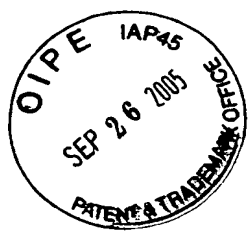
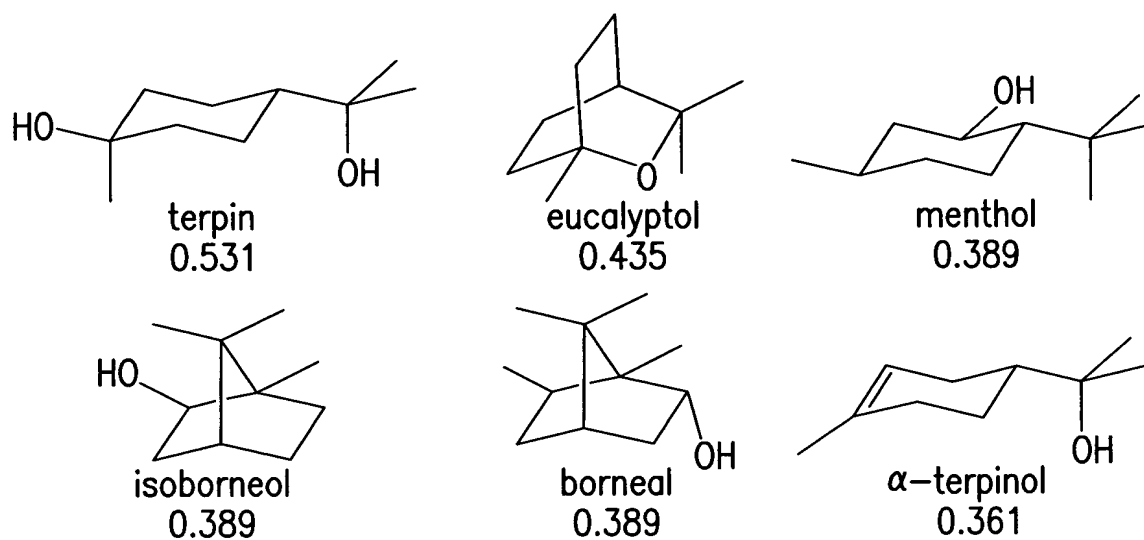
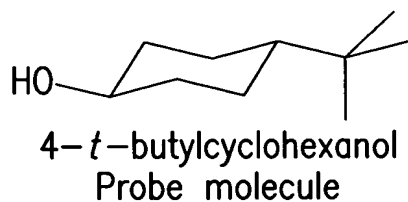


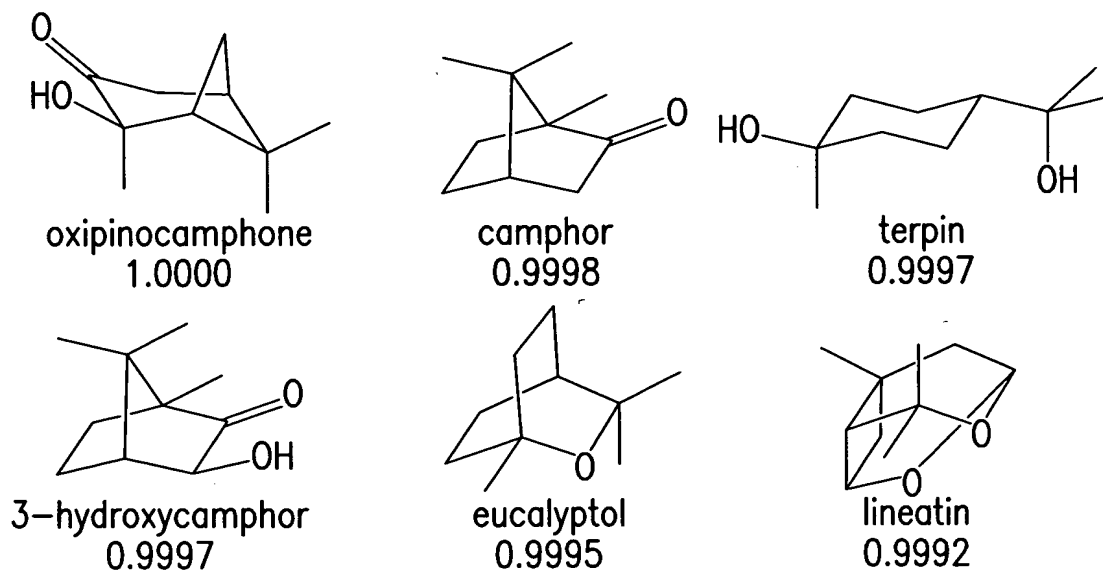
FIG. 1



Probe and its twelve most similar  
monoterpenes selected using 2 singular values



6 Most similar by Tanimoto similarity

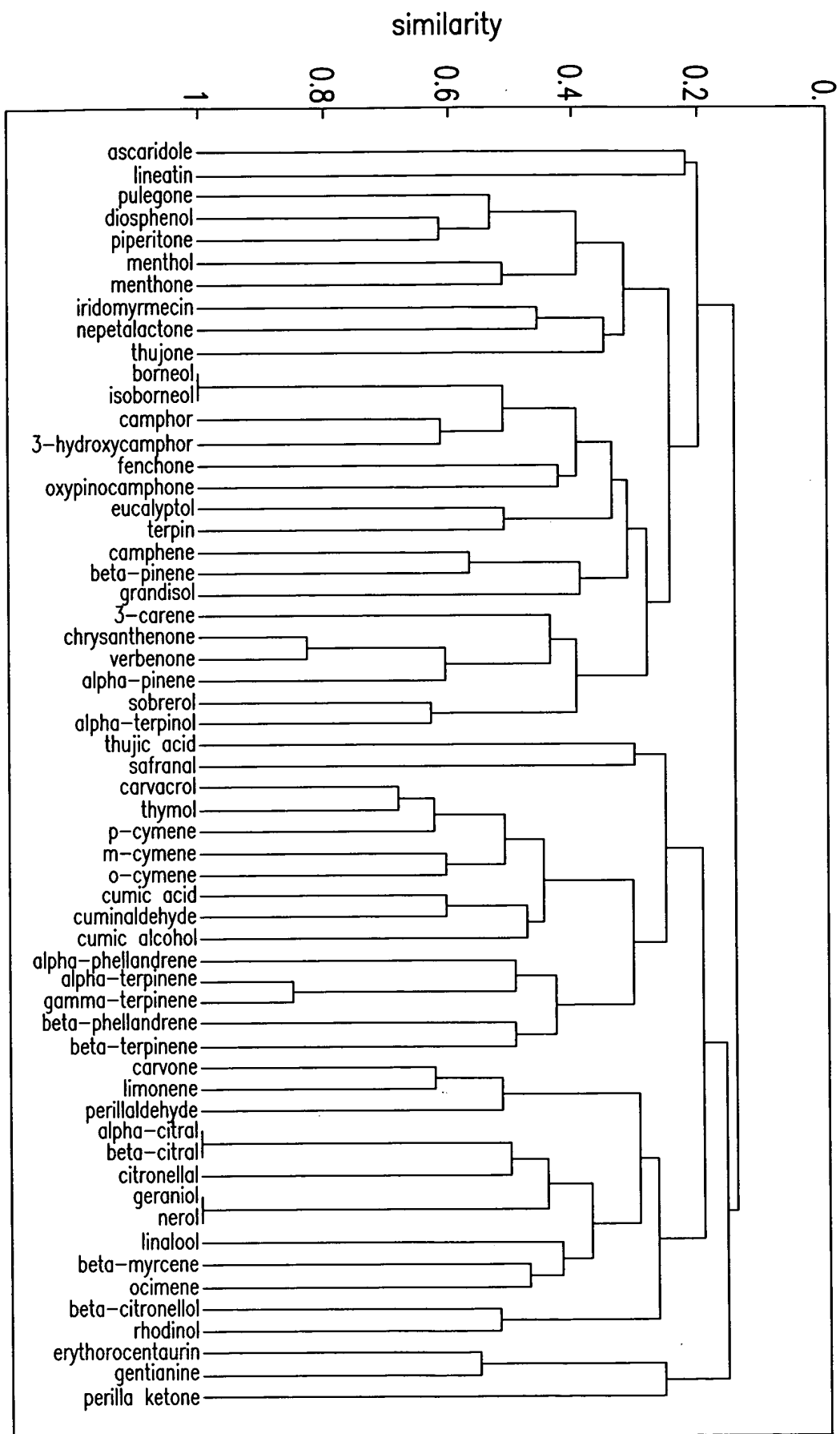


6 Most similar by LaSSI similarity

FIG.2



FIG.3A



Dendrograms Showing Similarities For Tanimoto and LaSSI  
Tanimoto similarity, average linkage clustering

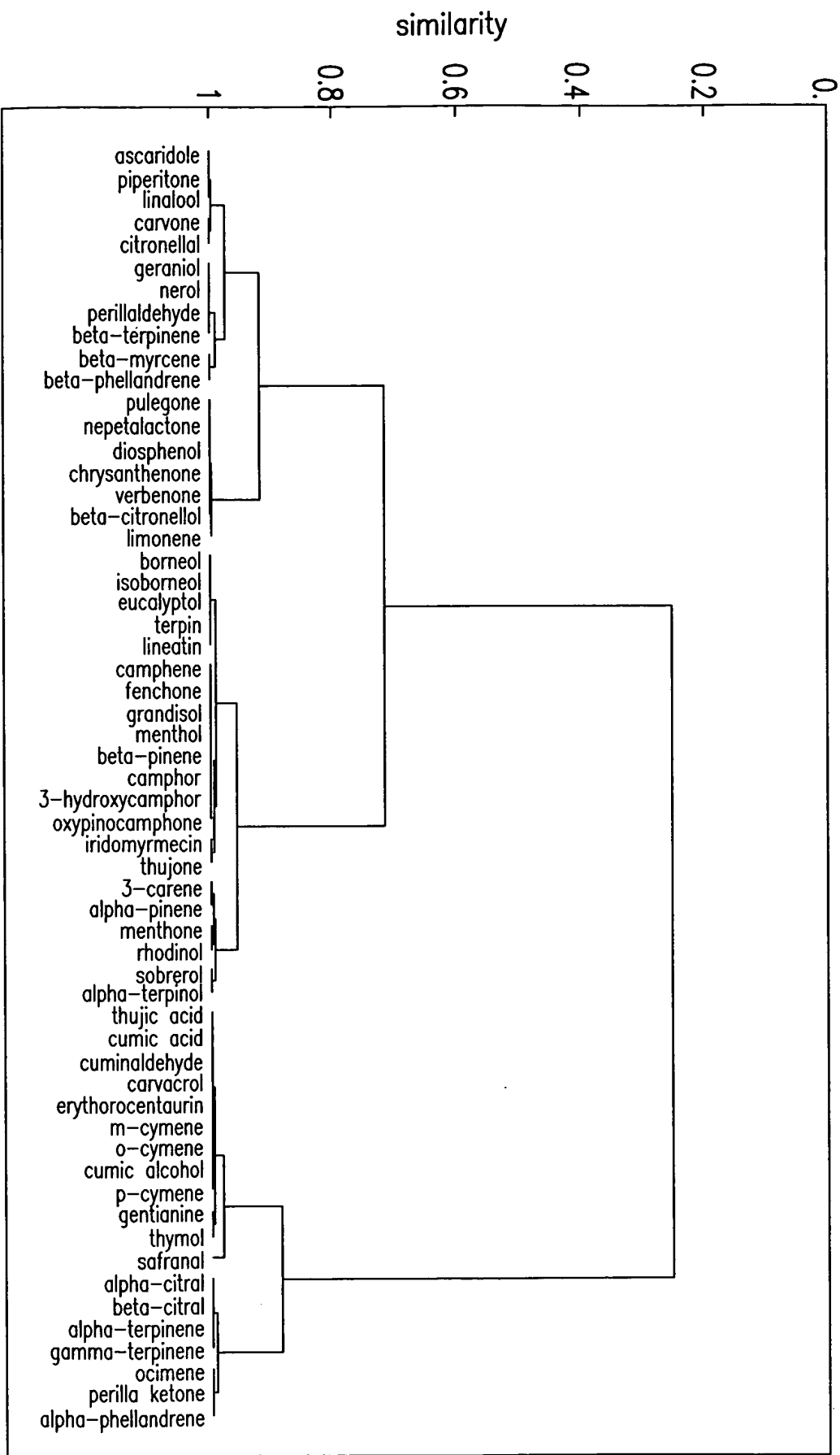


FIG.3B

Dendrograms Showing Similarities For Tanimoto and LaSSI  
LaSSI similarity (2 singular values), average linkage clustering

Two-dimensional Plot of Example Database Compounds and Probe Compound

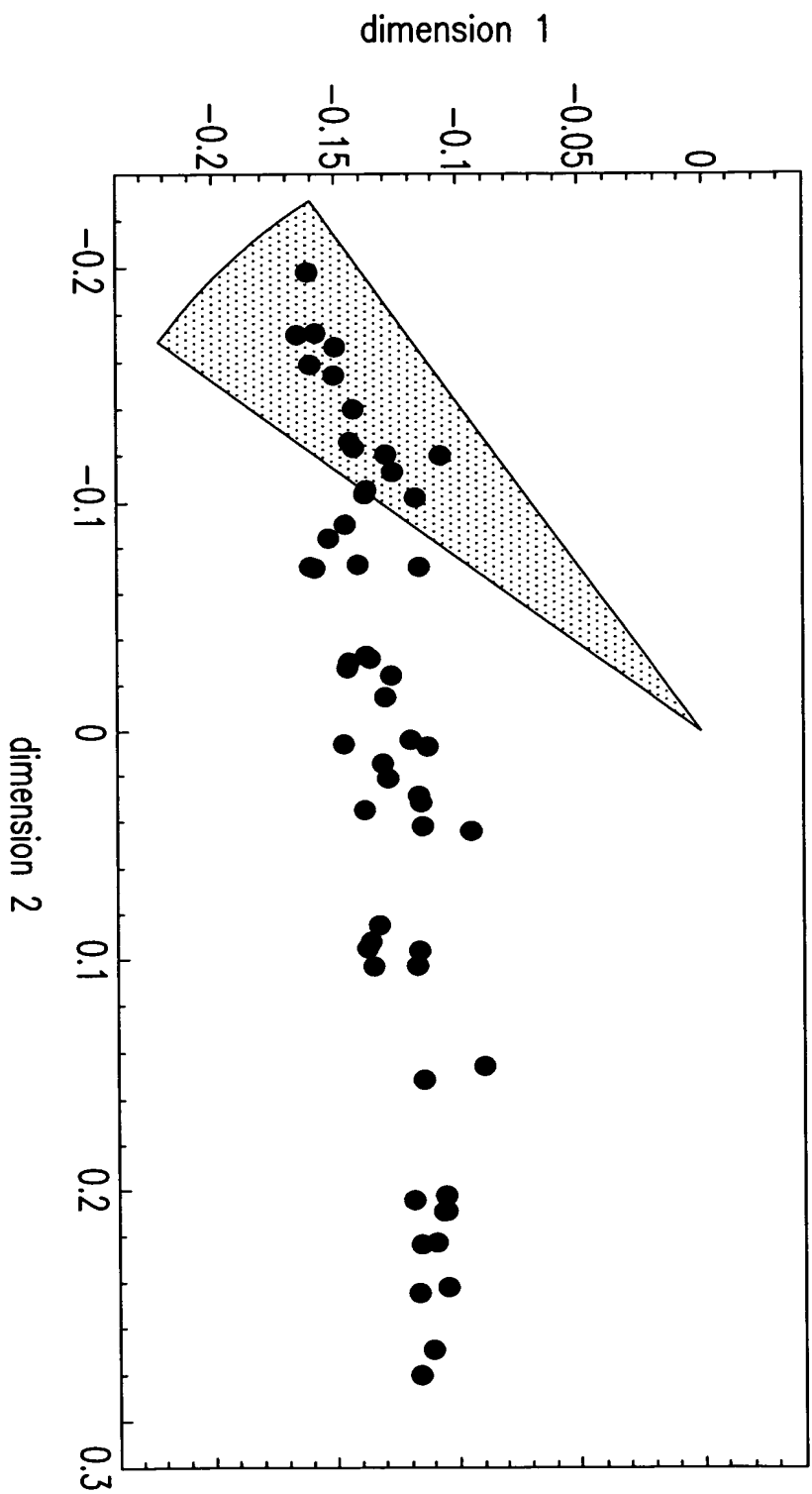


FIG.4



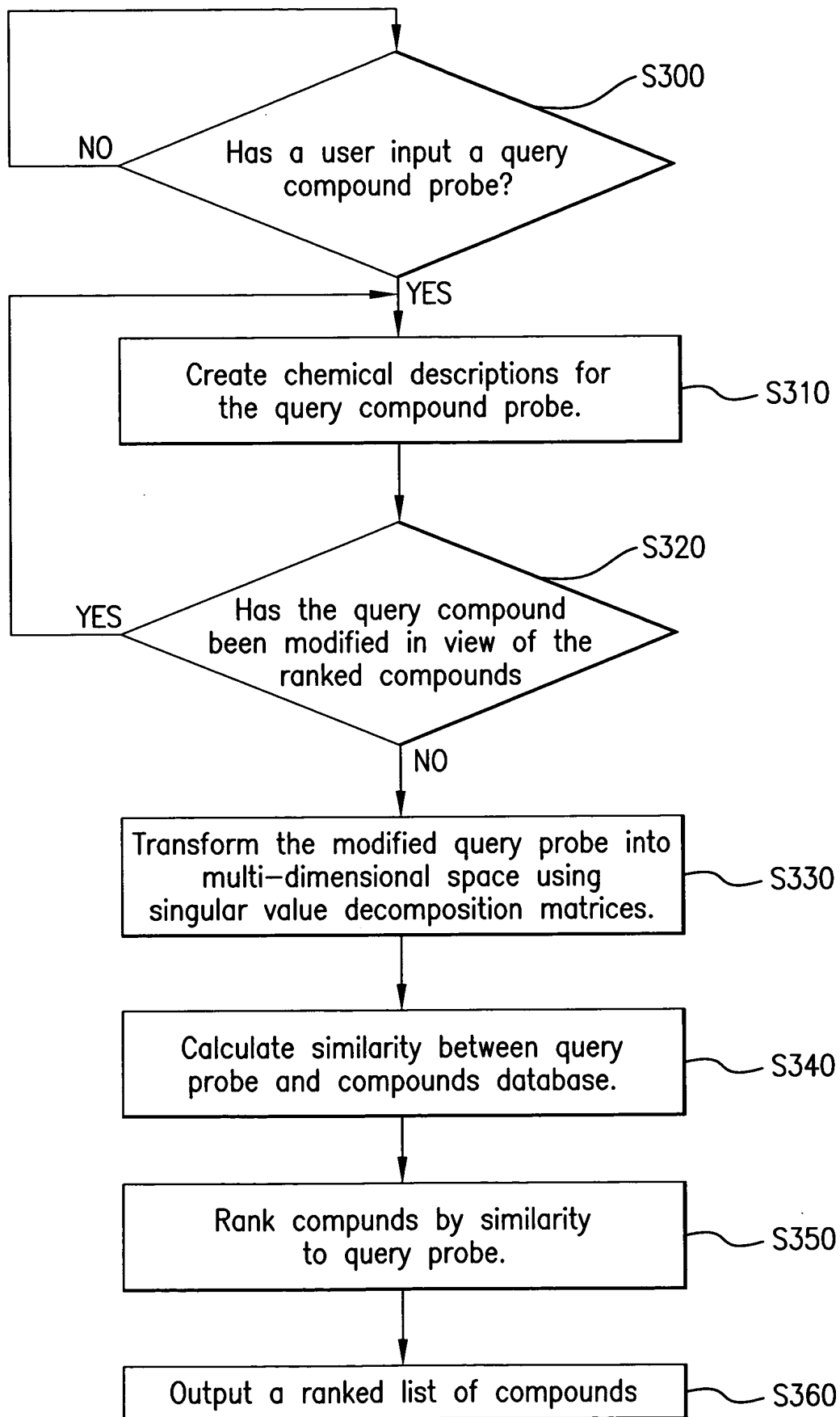
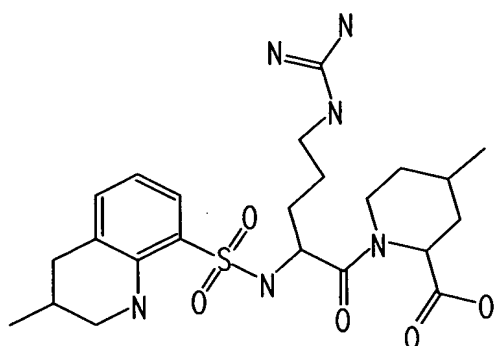


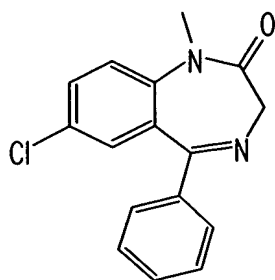
FIG. 5



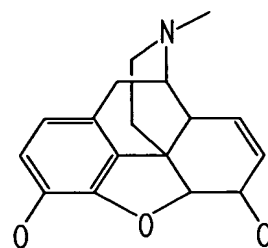
Standard probes used in this study. Each is labeled by the MDDR external registry, its name, and associated activity.



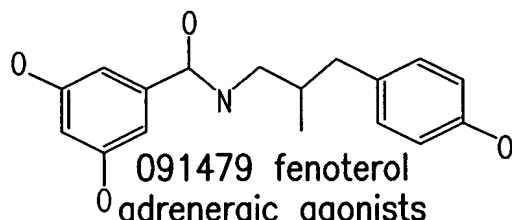
090744 argatroban  
thrombin inhibitors



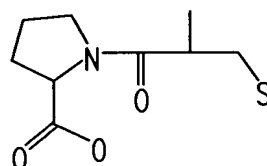
091323 diazepam  
anxiolytics



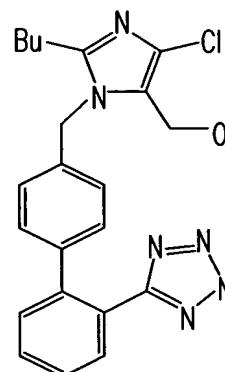
091342 morphine  
opioid analgesics



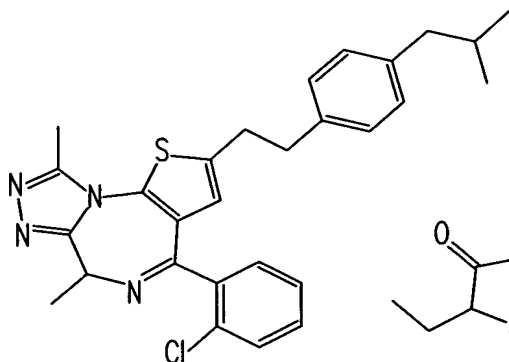
091479 fenoterol  
adrenergic agonists



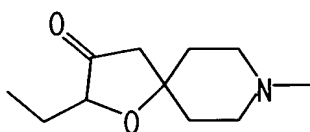
115230 captopril  
ACE inhibitors



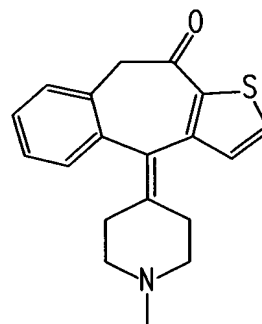
140603 losartan  
All blockers



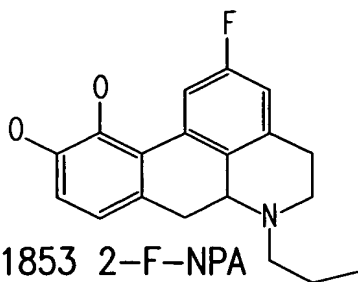
144822 israpafant  
PAF antagonists



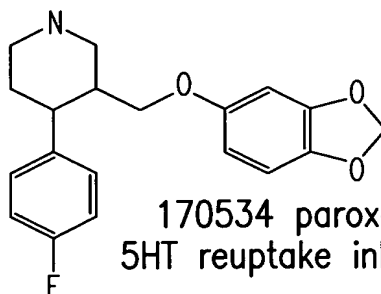
152580 YM-954  
muscarinic agonists



158611 ketotifen  
antihistamines



161853 2-F-NPA  
dopamine agonists



170534 paroxetine  
5HT reuptake inhibitors

FIG.6a

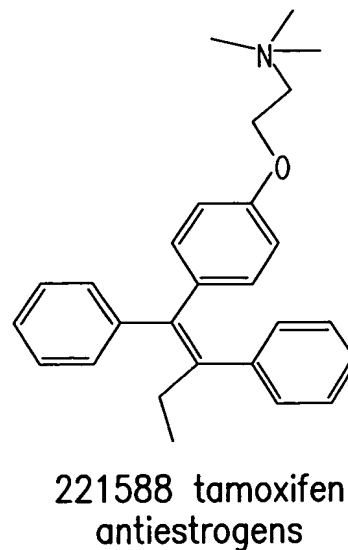
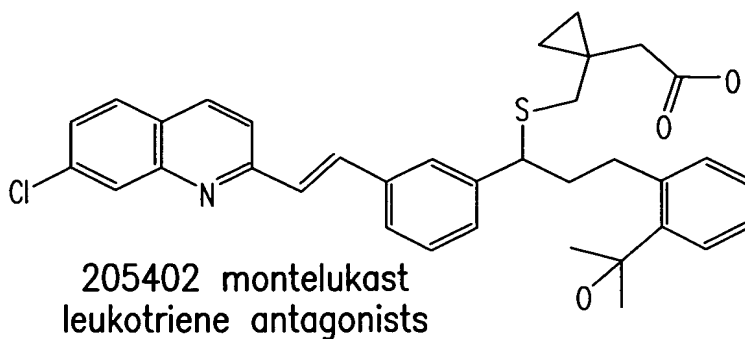
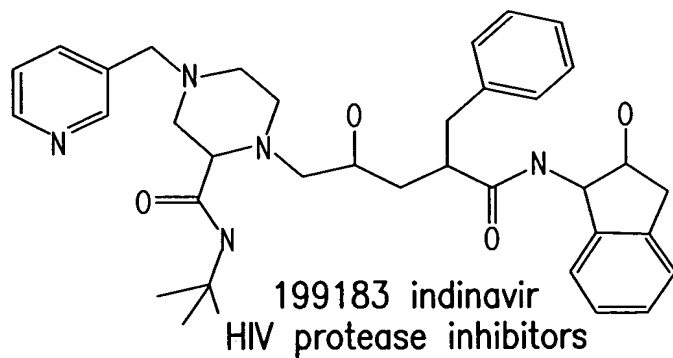
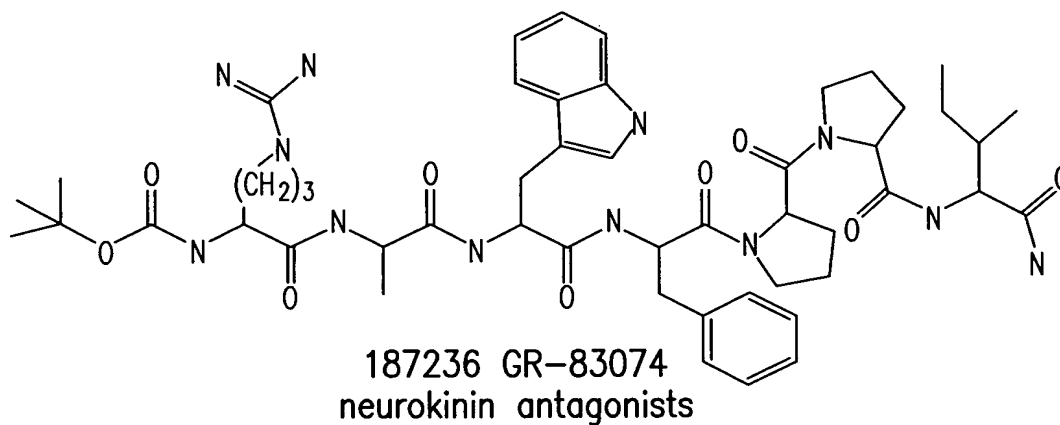
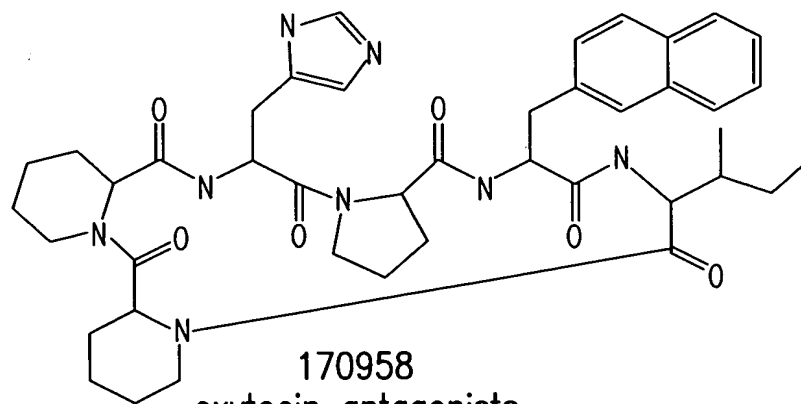
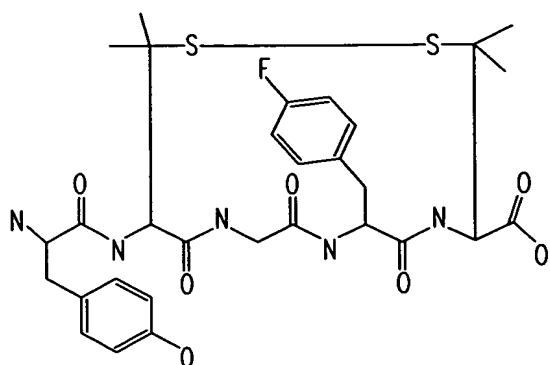


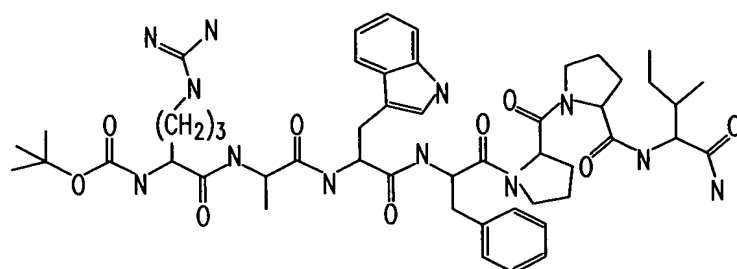
FIG.6b



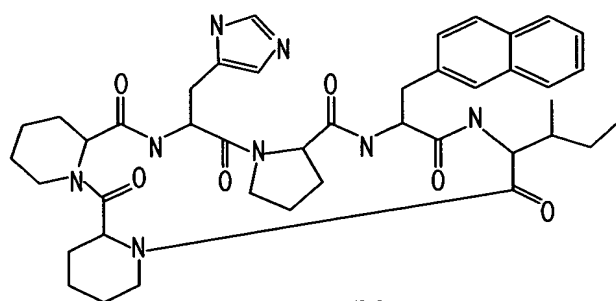
Probes used for peptide → non-peptide tests.



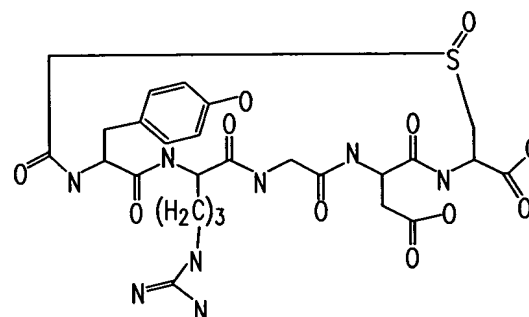
159880 F-DPDPE  
opioid analgesics



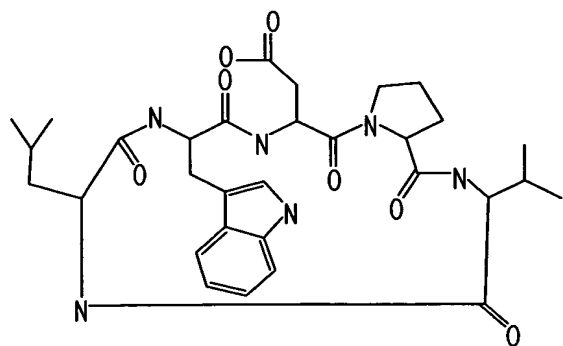
187236 GR-83074  
neurokinin antagonists



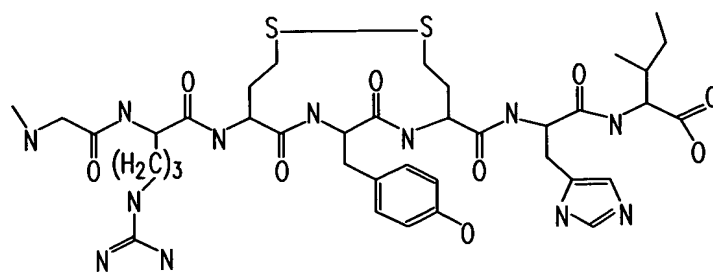
170958  
oxytocin antagonists



188541 G-4120  
glib/illa antagonists

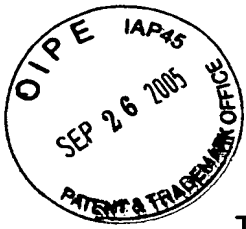


174556 BQ-123  
endothelin antagonists

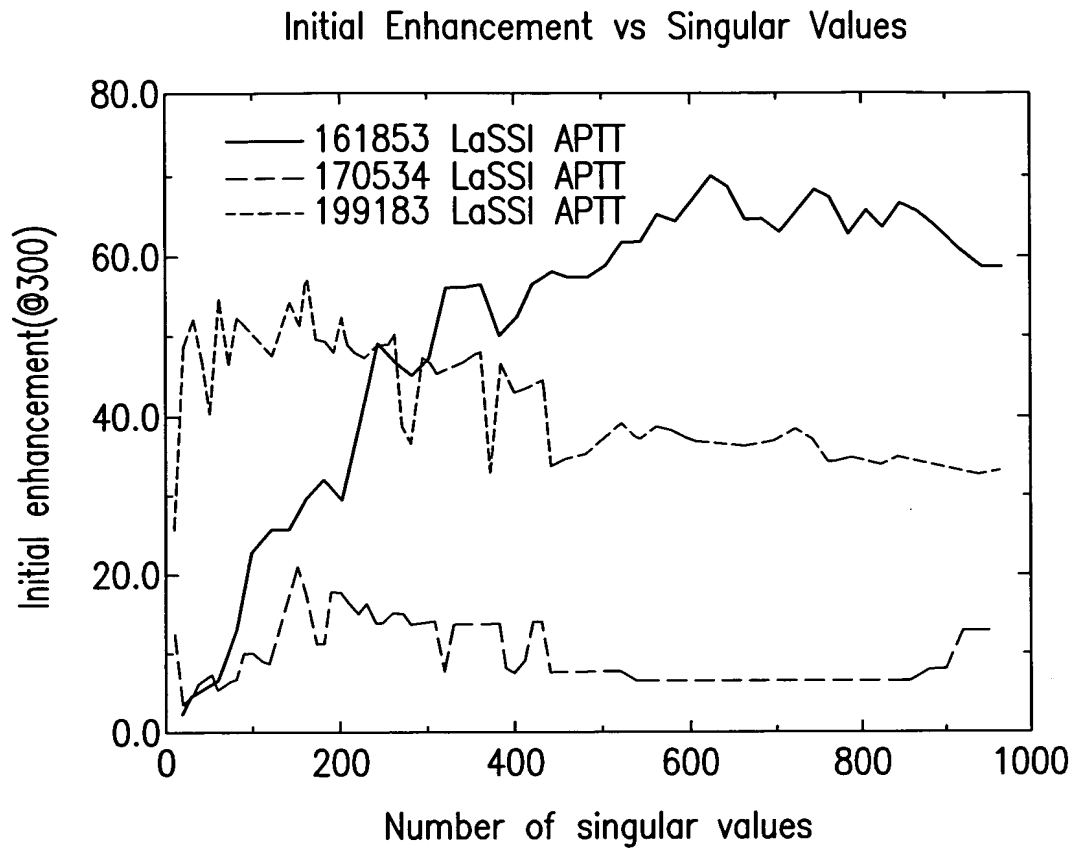


cycAll [Sar<sup>1</sup>,Hcy<sup>3,5</sup>,Il<sup>8</sup>]All  
All blockers

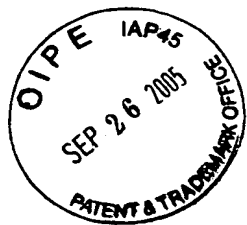
FIG.7



The initial enhancement for LaSSI APTT vs the number of singular values shown for three examples.



**FIG.8**



The correlation of rank for Dice APTT and LaSSI APTT. The example is 199183 using 170 singular values. Each circle represents a HIV protease inhibitor.

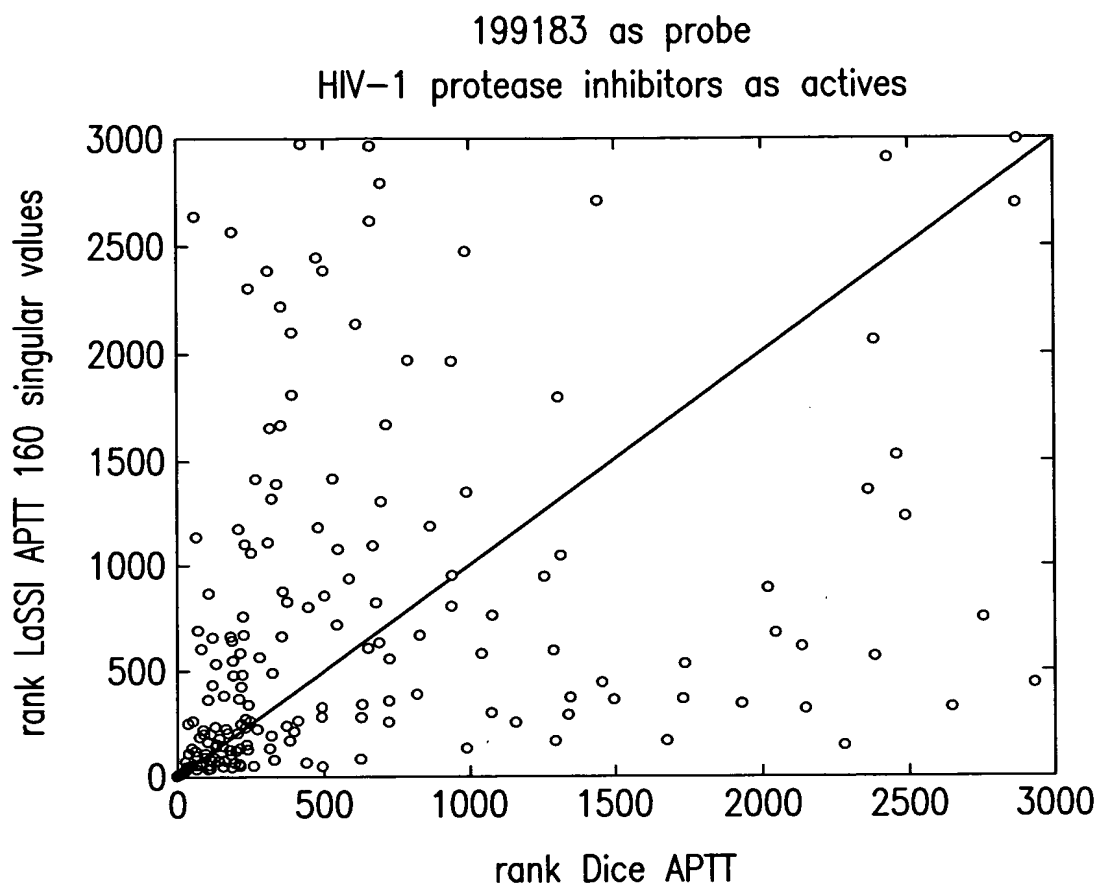


FIG.9

Selected compounds that have extremely different ranks in Dice APTT vs LaSSI APPT. The examples are 161853 with 800 singular values, 170534 with 150 singular values. The ranks in two types of search are indicated.

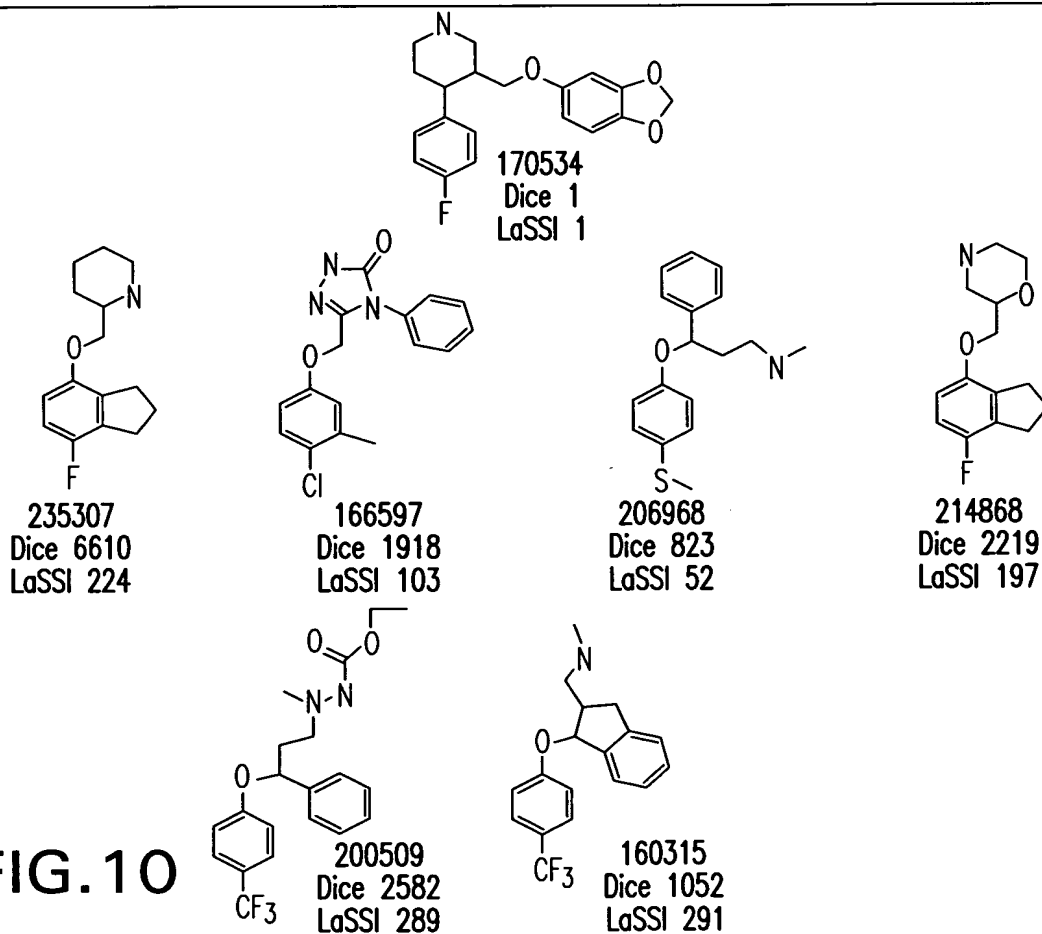
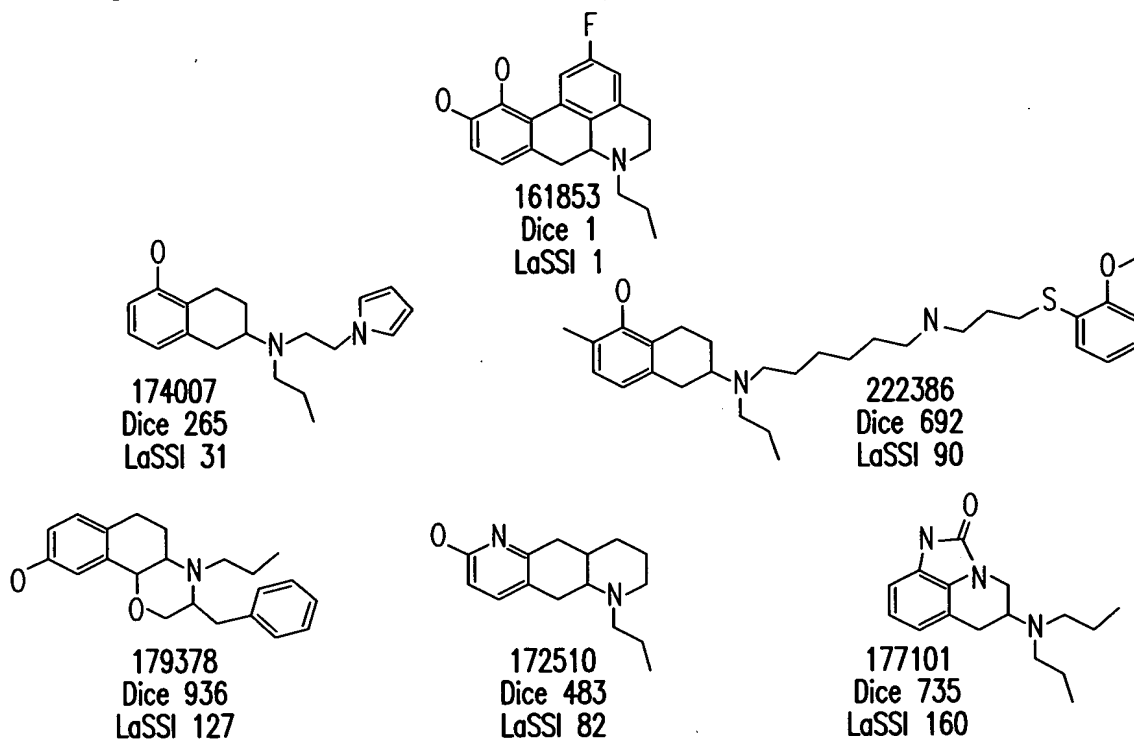


FIG.10



Mean similarity of the probe to each molecule in the top scoring 300 compounds (MSP300) for three samples. The MSP300 for Dice searches are shown as a horizontal lines. For comparison, the MSP300 for random sets of 300 compounds from MDDR would be 0.12–0.14.

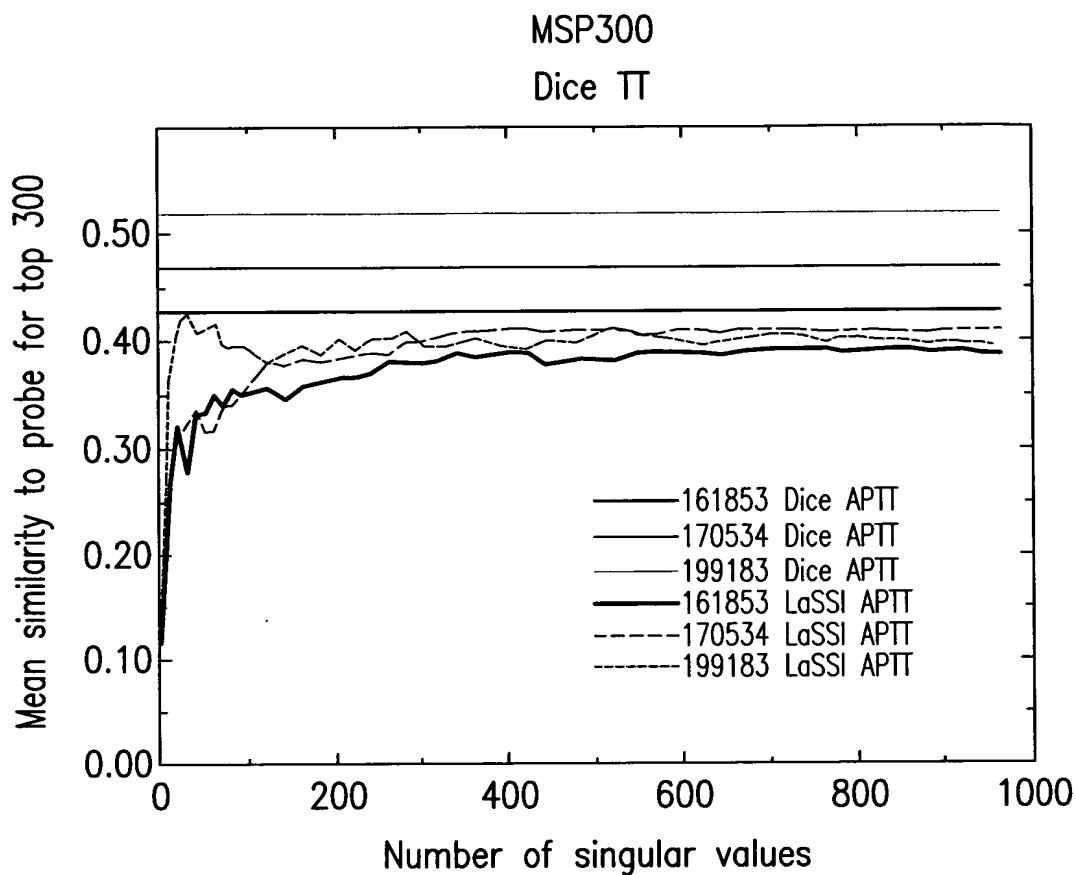


FIG.11



Cumulative actives found vs compounds tested for 187236 as a probe.  
The actives are oxytocin antagonists that do not contain a dipeptide moiety.

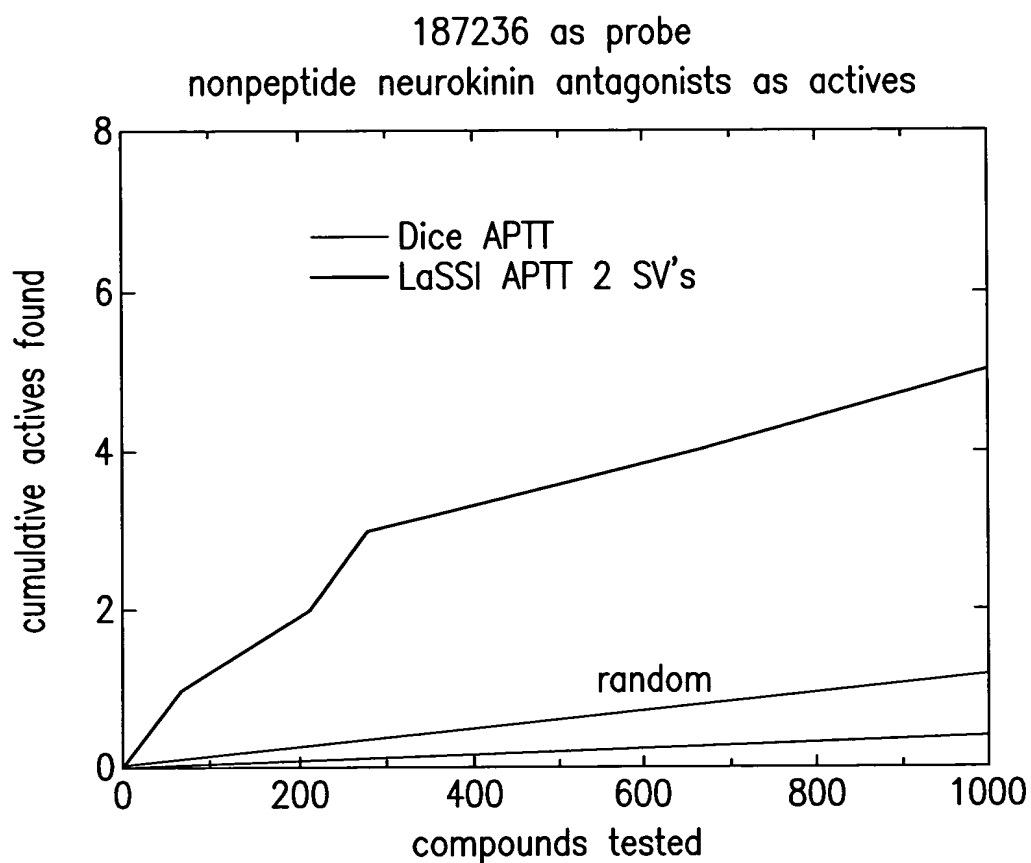
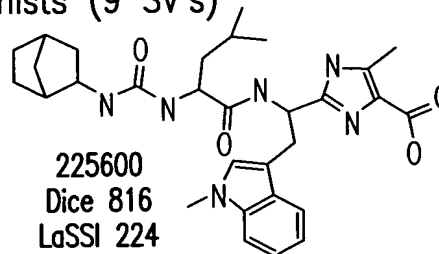
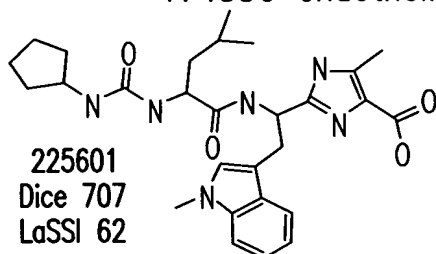


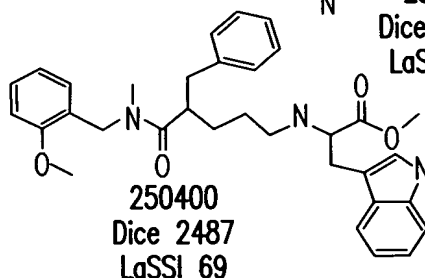
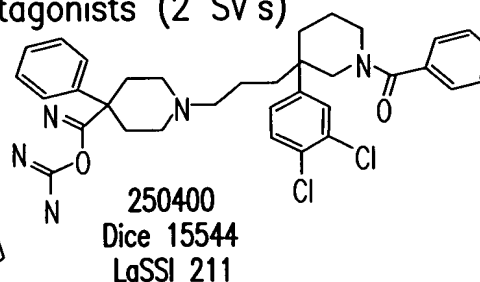
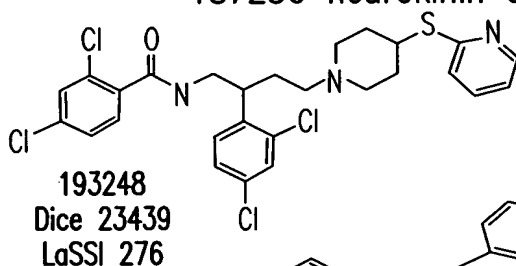
FIG.12

Selected non-peptide compounds that have extremely different ranks in Dice APTT vs LaSSI APTT for the statistically significant peptide to non-peptide examples.

174556 endothelin antagonists (9 SV's)



187236 neurokinin antagonists (2 SV's)



188541 gp11b/111a receptor antagonists (15 SV's)

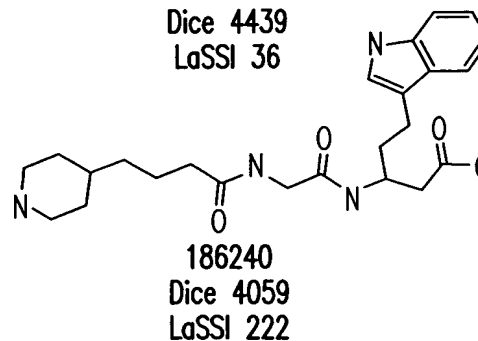
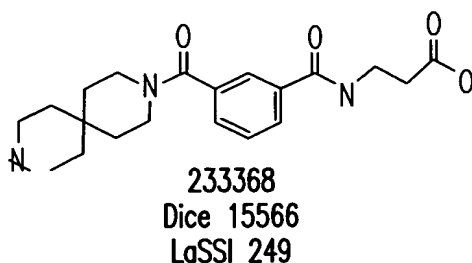
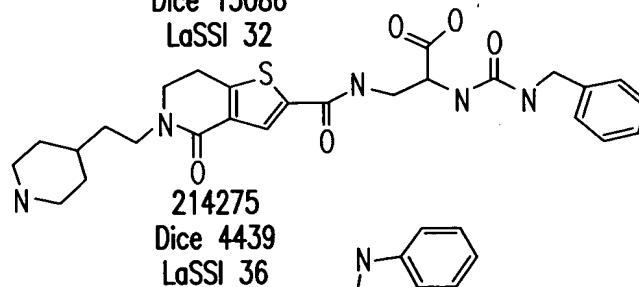
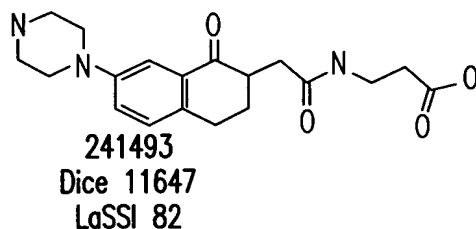
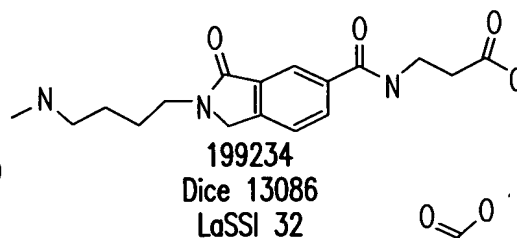
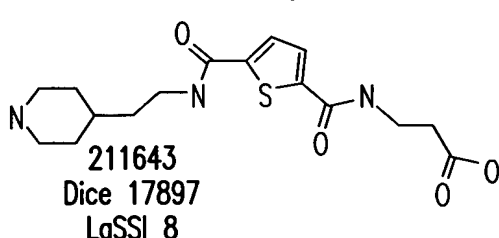


FIG.13

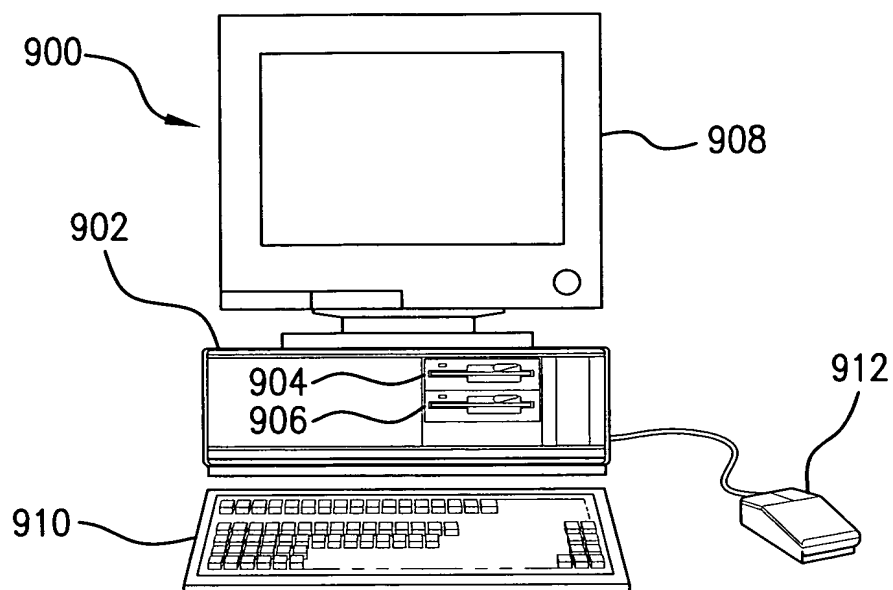


FIG. 14

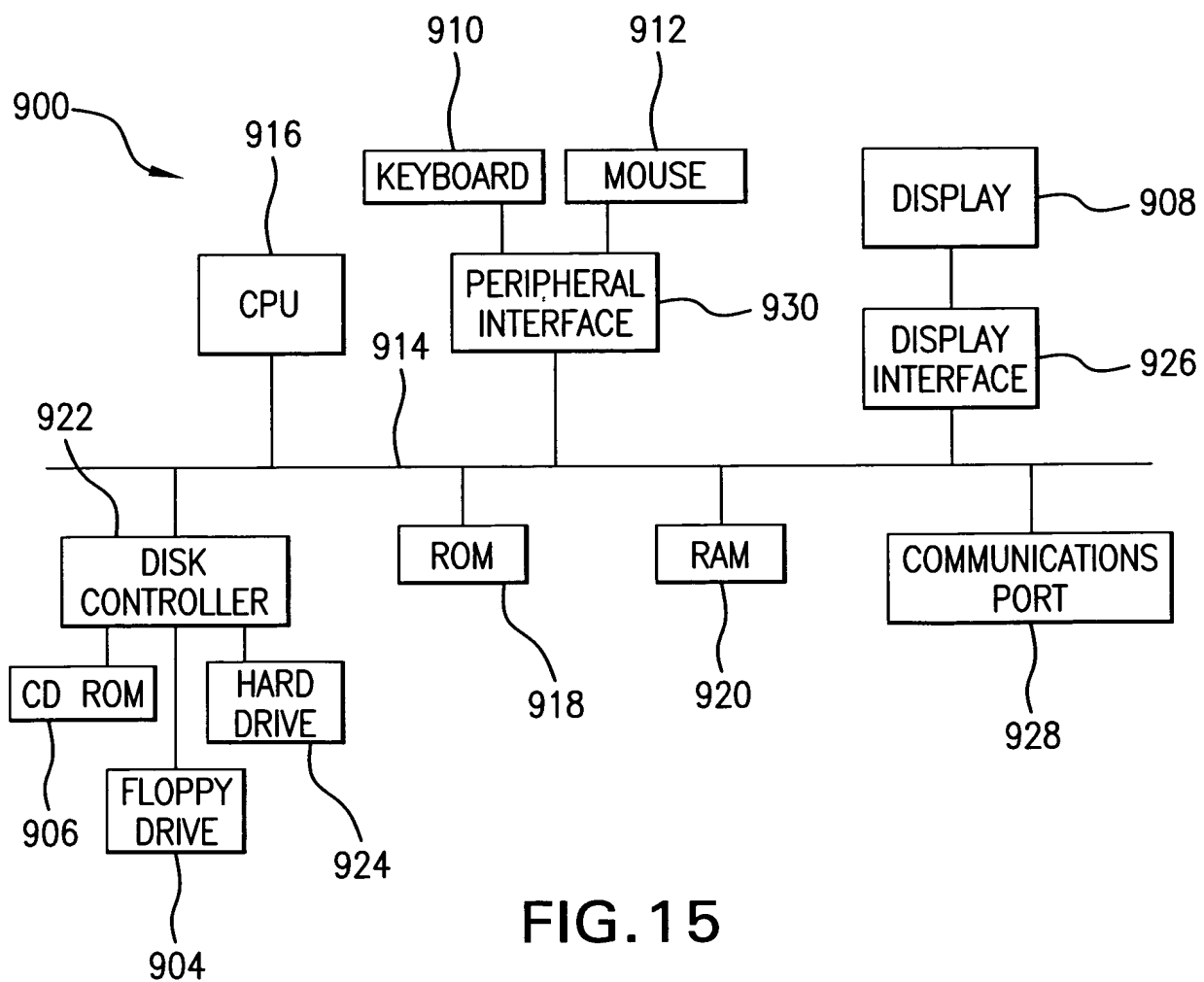


FIG. 15



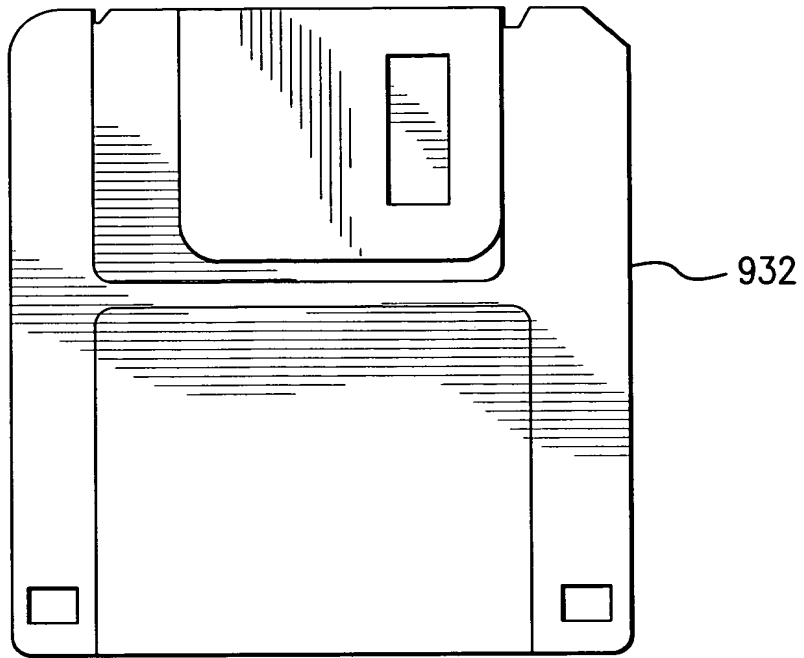
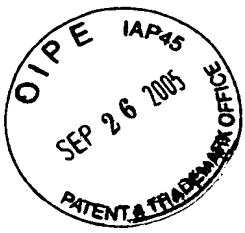


FIG.16